**Zetetic Scholar**
An Independent Scientific Review of Claims of Anomalies and the Paranormal
Marcello Truzzi, *Editor*

July 14, 1982

Dear Mr. Bird:

My records are unclear as to whether or not I answered your letter to me of a couple of years ago,(I think I did but see that I have no copy in my files. If I failed to do so, please accept my apology.)

I write you now because I understand that you are associated with Mankind Research Unlimited. I am most intersted in knowing more about that organization and its current status. Since I am seeking to establish an international network of expertise on anamalies research (I enclose some flyers and an application form should you wish to be a resource consultant), the MRU sounds quite relevant. Also, I am told that they are concerned with Soviet efforts, and I have been compiling an extensive bibliography on U.S. and Soviet government work on paranormal matters (I am already in touch with Stan Krippner, Larissa Vilenskaya and some others in this regard). I also have done some work on Chinese parapsychology and wonder if the MRU is monitoring that as well.

In any case, I do want to re-establish contact with you over what I think are our mutual interests.

Sincerely,

Marcello Truzzi

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28 July 1982

Dear Marcello!

Some years ago I helped Carl Schleicher to get started with MRU. I have had almost no contact with Carl since. I bleieve you should write him to get what you want.

I see that a number of the people associated with CSAR are al
associated with Sturrock's Society for Scientific Exploratio
Formed for the Study of Anomalous Phenomena SSE. Are the
two orgainizations comptttors? How will they interact? W
are the priorities of each?

I enclose the latest on the work started by Kervran on we
energy transmutations. I beleive some serious work ought
be done on this by a well-funded group. What do you thi

Your review of my book The Divining Hand (Dutton 1979) s
time ago was stuffy and unfair.

I would be glad to help you out in any way I can.

All best

Christopher Bird Ch. Bird

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15 October 1980

Dear Marcello Truzzi,

Thank you for your courtesy and attention in replying to my note remarking on the brief review of my book in the Zetetic Scholar.

I am not sure what good it does to continue debates on the subject of your letter especially given the fact that a "brief note" has appeared in a publication which probably goes out to less than 1000 people. My reply is in homage to the courtesy and attention mentioned above.

Dowsing is an art or a talent like sculpture, violin-playing or, say, high-jumping to name but three. Its spectrum of achievement, therefore, runs from virtuosity on the upside through amateur ability to total ineptitude on the downside. Virtuosi in sculpture turn out what their peers or the cognoscenti instantly recognize (in terms of power, beauty, imagination or whatever). Virtuosi on the violin play like Stern or Oistrakh, or win the international Tchaikowsky competition in Moscow. Virtuosi in high-jumping set world records or come back from the Olympic Games with medals. Virtuosi in dowsing find, among other things, badly needed underground resources such as water, hydrocarbons or minerals often where and when scientifically trained experts such as hydrologists and geologists have been, or are, unable to do so.

To illustrate a recent case for water: a competent dowser and friend of mine recently dined with the Chairman of the Board of a large company listed on the New York Stock Exchange. Knowing my friend was a dowser, the chairman asked whether he could be of service to his company. One of its subsidiaries in Ecuador ran the largest beer brewery in that country and the brewery had run out of its natural supply of water. A number of German experts, among them hydrological engineers, had been searching fruitlessly and at considerable expense for an alternative supply of water. Would my friend, asked the chairman, consider going to Ecuador and find the needed water that they had been unable to find?

My friend and his Spanish-speaking wife were flown by the company to Ecuador where he proceeded by dowsing to locate an underground water source not far from the factory. A drill rig was immediately set up over the spot indicated and drilled a well that supplied enough water to fulfill the brewery's copious needs. Learning of this success, the management of a cement plant across the way which itself was running dry of badly needed water called upon my friend to locate a new source. After doing so, my friend went on to locate some 20 more potential water sources. Of the several that have been drilled, all produced water.

My friend was paid a handsome fee for his services and returned to the United States. All of the above can be attested to by several responsible observing parties.

In the case of hydrocarbons: I have recently met a young man who dowses for oil and gas. He has recommended the siting of some 200 wells over the past two or three years, using his dowsing talents to do so. He has predicted the depth of drilling to producing oil sands in these wells. His "track record" or "batting average" of success-- defined as dependent upon whether the well dowsed was a commercial success for independent companies and their investors -- is above 90%. The comparable rate of success for oil and gas wells (producers vs. non-producers or dry holes) is, depending on the region or terrain, off-shore or on-shore, ranges from 1 in 7 to 1 in 25 or, in cases such as the Baltimore Canyon or the Gulf of Alaska, where billions of dollars have been wasted on the prognostications of so-called geological experts, much worse.

Finally, with respect to minerals, events have come to light in the Soviet Union that indicate the dowsing method is not being overlooked as a means for tapping such resources (and for solving other problems). You will find documentation in the appendix to this letter. As a final appendix you will also find a recent article in *Science* referring to the almost complete lack of reliability in predicting sources of hydrocarbons offshore and calling for *new methods* to be developed in searching for them.

The above cases, and many more like them, are on record to show that competent dowsers, if not virtuosi, are solving problems. None of these dowsers needs the approbation of quasi-scientists whether anthropologists, such as Vogt, psychologists such as Hyman or sociologists such as yourself to establish for them that their talent, or art, has performed a service or solved a problem. The facts themselves testify to both.

Indeed, to ask Vogt to review my book is like asking Dracula to superintend the blood-bank. He has probably never held a dowsing rod in his hands, far less found a water well, an oil or gas deposit, or a rich vein of mineral ore with it. He is as dead set against the idea that dowsing can work as is Jay Lehr -- first recipient of a PHD. in hydrology (from Arizona University in 1962) -- who runs the National Water Well Association and who made a film, "The Water Witch Drowns in His Own Dry Hole," which maligns and calumnates dowsers as cranks and charlatans.

If you reread the short section on Wayne Thompson, operator of the largest water drilling concern in northern California, and himself a dowser and employer of dowsers in his business, in the first chapter of my book, you will see what he had to say about Lehr's film as a member in good standing of Lehr's Association.

The point is: why are not the Wayne Thompsons or the Dr. Treadwells (note that he has a doctorate too; look him up in the index of my book) just as good critiques of an art as two professors, one of psychology the other of anthropology?

As for yourself, if you are not a believer in the evidence "thus far put forward," then you havn't seen the evidence you're looking for. You're looking for it in articles and books. I suggest you go out and get some drilling mud on your shoes and hang around a few expert dowsers in the field until the results they are achieving will supply you the evidence you are seeking.

How many psychologists have done exactly that? I don't need to raise the question of geologists since most of them, with 7-8 years invested in academic training, and using, as they do, millions of dollars of equipment, are only going to be irritated at best, and sorely vexed at worst, by any dowser with no such training or such equipment that could best them.

You can "stick to your statement" that work on psychokinesis is "scientifically dubious." I don't know what "scientifically dubious" means. Have you read the article over 30 pages long by Dr. Charles Crussard, chief scientist of the multinational firm, Pecheney-Ugine-Kuhlmann, about his work with metal benders and published in France's La Metallurgiste? There is nothing dubious about this scientist's report. Maybe it's only Marcello Truzzi who is dubious.

You may also want to read (enclosed) the article published in the journal Physiological Chemistry and Physics by Dr. Z.V. Harvalik, a physical chemist who ran a large laboratory for the U.S. Army. Dr. Harvalik, By working with dowsers and the dowsing phenomenon over some 30 years, rather than against it, came to the realization of the reality of the phenomenon and has gone on to discover, therefore, some highly interesting data about sensors for magnetic fields in the human body. What is "dubious" about his research?

You indicate that certain "scientists" are not only skeptical about dowsing but "outright hostile" to it. Oh, yes, to be sure, but what has hostility got to do with a dispassionate consideration, scientific or other, of the facts?

When you say "the general physical and psychological community" considers PK non-existent, what are you really saying? Does general mean the majority, the mass? Since when was any scientific discovery made by the mass? All of medicine was at one time against Pasteur, dear boy. But they all died and he lives!

My book does not seek to prove anything. It seeks to present data and arouse inquiry. It is worth its price for the bibliography alone. A dozen "scientists" and professionals in other fields have made positive comments on it.

But all of that pales before the reaction of the client who, with a dowser, has found the resources he is seeking.

Cordially, C. B.

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ferences ($P < .001$), except *Forskalia*. Testing the equality of two percentages: R. R. Sokal and F. J. Rohlf, *Biometry* (Freeman, San Francisco, 1969), pp. 608–609.
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19. T. W. Pietsch and D. B. Grobecker, *Science* **201**, 369 (1978).
20. J. E. Lloyd, *ibid.* **187**, 452 (1975).
21. I thank A. Alldredge, G. R. Harbison, J. King, P. Kremer, S. Liedle, V. McAlister, and J. Stretch for diving assistance, J. King for photography, and A. Alldredge, B. Robison, and J. King for aid in preparing the manuscript. Supported by NSF grant OCE 76-23534, and the International Women's Fishing Association. The Marine Science Institute of the University of California, Santa Barbara, provided field equipment; use of the Catalina Marine Science Center of the University of Southern California was generously provided; cruises aboard Woods Hole Oceanographic Institution vessels were made possible by G. R. Harbison and L. P. Madin.

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## Oil and Gas in Offshore Tracts: Inexactness of Resource Estimates Prior to Drilling

The report of Uman *et al.* (*1*) illustrates that the estimation of oil and gas resources prior to drilling is a very inexact process. Uman *et al.* compare the resource estimates made by the U.S. Geological Survey (USGS) for a series of tracts on the federal outer continental shelf (OCS) prior to leasing and drilling with the estimated reserves discovered after drilling. They also compare the current estimation procedures with those that have been used in the past. The most important conclusion that can be drawn from their report is not that the present procedures are significantly better than earlier procedures (they are not) but that both procedures are ineffective. As Uman *et al.* point out, there is a significant positive correlation between prelease sale estimates and postdrilling estimates, but the correlation for the current Monte Carlo estimation procedure (*2*) is only $r = .45$. This means that only 20 percent of the variation in postdrilling estimates can be associated with the predrilling estimates; 80 percent of the variance is independent of the prior estimates. The standard error of the estimate is very large, and there is thus a wide confidence interval about the regression (Fig. 1). Figure 1 also shows the confidence bands of the forecast, which exceed two orders of magnitude at the means. These results suggest that current estimation procedures are very imprecise at best. Figure 1 of Uman *et al.* (*1*) shows a line having a slope of $y = x$, or perfect agreement between presale and postdrilling estimates; however, the slope of the regression between presale estimates and postdrilling estimates is significantly less than 1.0, and the intercept is significantly greater than 0.0. Therefore, there is a tendency to overestimate resources in advance of drilling when the presale estimates are less than about 10 million barrels of oil equivalent (MMBOE) and to underestimate resources when the presale estimate is greater than 10 MMBOE.

Perhaps it is most critical to note that Uman *et al.* are dealing with a censored data set, because they consider only those tracts that were leased and from which hydrocarbons were subsequently produced. They did not include tracts for which presale estimates were made although no commercial quantities of oil or gas were found. Since approximately 38 percent of Gulf Coast lease tracts that have been drilled have failed to produce (*3*), there must be about 18 additional points that should have been plotted in figure 1 of (*1*) for sales 33 to 44. Since these additional points would all lie below any values shown, it is quite possible that these additional tracts would cause the correlation between prelease estimates and postdrilling estimates to become zero or even negative.

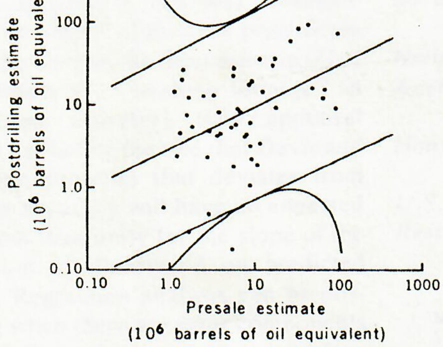

Fig. 1. Presale and postdrilling estimates of recoverable hydrocarbons for 49 tracts of lease sales 33 to 44 on the federal outer continental shelf. The central straight line is the regression of postdrilling estimates on the presale estimates; the outer straight lines are the upper and lower 95 percent confidence limits for the regression. The curved lines are the upper and lower 95 percent confidence limits for the estimates made prior to leasing.

The USGS prelease evaluation procedure is an extension of widely used reservoir analysis methods for economic appraisal (*4*), but this procedure is applied under conditions of extreme uncertainty when used in advance of drilling. By using this method, one can calculate the volume of recoverable oil or gas in place in lease tracts on the basis of a consideration of 17 diverse geologic parameters such as reservoir thicknesses, volumes of closure, porosities, water saturations, and ratios of oil to gas (*5*). Since these reservoir characteristics are not known prior to drilling, they must be estimated from seismic data and from logs and production histories of wells drilled elsewhere in the region. In an attempt to account for uncertainty, the parameters are given as distributions and the volumetric calculations are performed by Monte Carlo methods. The results are distributions of possible resources, which then are tempered by the analyst's assessment of the probability that no recoverable hydrocarbons exist at all in the tracts. The presale estimates given by Uman *et al.* (*1*) are the expected values of these distributions. In tract evaluation, further analysis is performed to yield expected monetary values, which can be used to establish fair market values and minimum acceptable bids set by the Bureau of Land Management.

The effort required to obtain the input distributions of geologic and reservoir properties required by the Monte Carlo analysis is substantial. The imprecise results reported by Uman *et al.* suggest that alternative estimation procedures should be investigated to determine if improved forecasts can be made or if estimates of equivalent precision can be obtained with substantially less effort. We have suggested (*6*) that it may be possible to make effective resource forecasts for tracts in the Louisiana OCS by regressing the oil and gas volumes of known reservoirs onto seismically perceivable variables, such as the apparent areas, heights, and volumes of closure of the structures which contain these reservoirs. A wealth of data are available in the Louisiana and Texas OCS that would permit these seismic properties, which are established in advance of drilling, to be statistically compared with the results of drilling. The regression could then be used to estimate the resources that may

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be contained in undrilled seismic prospects. Unfortunately, this simple statistical procedure, as well as other possible alternatives to the Monte Carlo simulation procedure, remain untested because it is not possible to obtain access to the necessary geophysical and production data. The procedures described by Uman *et al.* are not effective from a statistical standpoint, and it remains to be determined whether more effective procedures can be devised.

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### References and Notes

1. M. F. Uman, W. R. James, H. R. Tomlinson, *Science* **205**, 489 (1979).
2. Data were extracted from a larger version of figure 1 of (*1*).
3. This percentage is based upon an earlier but much larger set of Gulf Coast lease tracts described in "Some basic statistical studies on federal offshore oil and gas lease well drilling and production: Leases issued in 1962 and prior years (LPR-19B data base)" (Applied Research and Analysis Section Report No. 78-24, U.S. Geological Survey Conservation Division, Lakewood, Colo., 1978).
4. P. D. Newendorp, *Decision Analysis for Petroleum Exploration* (Petroleum Publishing, Tulsa, Okla., 1977).
5. H. Akers, Jr., "Monte Carlo range-of-values program description" (internal memorandum, U.S. Geological Survey Conservation Division, Anchorage, Alaska, 1976).
6. J. C. Davis and J. W. Harbaugh, paper presented at the Conference on Economics of Exploration for Energy Resources, New York, May 1979.

24 September 1979; revised 2 January 1980

We agree with Davis and Harbaugh that the estimation of oil and gas resources prior to drilling is a very inexact process. In (*1*, p. 490) we concluded "that the ability to predict the volume of recoverable resources under OCS [outer continental shelf] tracts (if any is discovered) appears to be limited to within a factor of 10." Whether this degree of ability is ineffective, as Davis and Harbaugh suggest, depends on how one defines what is required to be effective. The purpose of our report (*1*) was to indicate the limitations of current procedures so that policy analysts might determine if this level of performance is good enough for the uses intended.

We did not conclude or even suggest, as Davis and Harbaugh imply, that the present procedures for presale estimation of resources are more accurate or precise than earlier procedures. The procedural changes occurred as a historic fact, and we reported a short-term perturbation in accuracy which accompanied these changes (sales 30 and 31). The reasons for the procedural changes had, in fact, nothing to with the degree of inaccuracy of the earlier methods in estimating resources but attempted to address the more obvious problems associated with assigning monetary value to tracts based on single-value estimates of the geological variables. (Statisticians and economists would qualify this problem as "nonlinear.") This point is very relevant to the alternative method suggested by Davis and Harbaugh, and we shall return to it after we make brief rejoinders to two misleading statements in their comment.

Contrary to the statement of Davis and Harbaugh, the presale estimates of (*1*) are unrisked estimates. Our study was concerned with only one of the three steps of the U.S. Geological Survey (USGS) evaluation process. Comparing risked presale estimates with postdrilling results would not separate the volumetric component of the appraisal from the risk assessment. We compared the discovered volumes where drilling resulted in discovery with the volumes expected in the event that drilling proved successful. Thus, no additional points should have been plotted in figure 1 of (*1*).

Davis and Harbaugh attach significance to their finding that the regression slope of postdrilling estimates on presale estimates (the latter used as the independent variable) is less than unity, pointing out that small finds were overestimated and large finds underestimated prior to drilling. This is true but not surprising, and not in any way a feature unique to USGS evaluation procedures [see, for example, the discussion in (*2*) of the problem of "vanishing tonnage" in the mining industry]. Any appraisal method (including the one that Davis and Harbaugh propose) that deviates from absolute accuracy will have an expected value less than unity for the slope of the regression of discovered on predicted values. Regression analysis can be misleading when there are error components in the independent variables, which is why we avoided it in our study.

Davis and Harbaugh suggest an alternative method for making presale resource estimates. The method consists of developing regression equations relating oil and gas volumes in known reservoirs to seismically perceivable variables and using these regressions by analogy in untested areas. This method is less direct than the conventional approach but potentially less expensive in the long run. It also appears to have two serious deficiencies. First, in addition to the usual problems of selecting an analog and finding the necessary data, the method does not allow for directional shifts off the regression line, which are based on known differences between the evaluation target and the analog. In present practice, analogs are used as general guides and can be mixed. For example, reservoir rock properties may come from one analog, hydrocarbon richness and maturity from another, and success ratios from yet another, each selected for its similarity to the evaluation target in different aspects of the geology. Basing the evaluation on a single analog would severely restrict the geologist's ability to incorporate geologic knowledge into his evaluation.

Second, if the basic requirement is to estimate something beyond the potential volume of hydrocarbons in a prospect, such as the net present worth of the property, the suggested method will be inadequate. The value of the property depends on extraction costs and the timing and rate of production, as well as the quantity of recoverable hydrocarbons in the ground. Analysis of these factors requires estimation of basically the same suite of geologic properties used to make the volumetric appraisal in the conventional manner. Using the suggested alternative in support of determinations of fair market value, or in setting bid levels, would result in more analytical effort, not less.

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### References

1. M. F. Uman, W. R. James, H. R. Tomlinson, *Science* **205**, 489 (1979).
2. M. David, *Geostatistical Ore Reserve Estimation* (Elsevier, New York, 1977).

14 July 1980

USSR-Appendix

Notable among such events are:

1) The preparation of a course of study in dowsing by Dr. Alexander G. Bakirov, professor of Geologo-Mineralogical Sciences at the Tomsk Polytechnical Institute, in Siberia. In an official letter, the USSR Ministry of Higher Specialized Education, accepted Bakirov's request that the course be allowed for facultative use in any institution of higher learning in the Soviet Union. The USSR has thus become the first country in the world to admit dowsing into the subject matter offered by professional schools.

2) In 1979, a book was published in Russian entitled Dowsing: An Ages-Old Riddle. It was authored by three physicists at the Latvian Academy of Sciences whose Editorial-Publishing Council recommended it for publication.

3) At the end of 1979, another Soviet book on dowsing had been finished in manuscript which, when published, should attract the attention of open-minded geologists charged with the development of natural resources in all countries of the world.

Entitled The Use of the Biolocational Method in Searching for Ore Deposits and Geological Mapping it is authored by senior geochemist N.N. Sochevanov and engineer-geologist A. Ya. Chekunov, and approved for publication in two separate assessments by senior scientists at the USSR Ministry of Geology.

The authors write that the "biolocational method -- the newest Soviet term for dowsing -- was tested over eight years in areas of the country ranging from permafrost regions in Yakutia and Noril'sk area to the hot semi-desert wastes of Central Asia, and east to west from the Yenesey mountains near Karsnoyarsk to the Baltic littoral...

Among geological formations revealed by dowsing as attested by subsequent core drilling or excavation, have been:

1. Water-bearing zones of highly fractured mineralized rocks of differing composition.
2. Zones of intense sulfidization.
3. Carbonate, quartz, migmatite and negmatite potassium oxides as well as zones of alkaline metasomatoses with impregnation of rare metal and rare earth mineralization.
4. Greisen bodies and zone of greisenization with high contents of copper molybdenum and silver.
5. Quartz-tourmaline-casserite, quarz-casserite and sulfide-casserite ore bodies.
6. Covered and hidden ore bodies of rare metals lying at depths the upper border of which was 100-300 meters from the surface.
7. Gold-quartz and gold sulfide ore zones, cove with friable sediments several dozen meters thick.
8. Magnetite, siderite and hematite ore bodies.
9. Covered and hidden copper-pyrite strata in the southern Urals at depths the upper border of which was 300-400 meters from the surface.
10. Pyrite-metallic ore bodies in the area near the northern end of Lake Baikal.
11. Deep-seated copper-nickel ores near Noril's

The authors of the Soviet manuscript have included an appendix of 24 cases where dowsing was used successfully over the past eight years to locate natural resources or buried artifacts. A translation of this appendix is attached to this proposal.

# Appendix I (Documentation)

translated from: Sochevanov, N.N. and A. Ya. Chekunov, Ispolzovanie Biolokatsionnogo Metoda pri Poiskakh Rudnykh Mestorozhdenii in Geologischeskom Kartirovanii (The Use of the Biolocational Method in Searching for Ore Deposits and Geological Mapping). (in manuscript)

translated by Cyril Muromcew and Christopher Bird
(August, 1980)

## Appendix 1: Information On the Effectiveness of the Biophysical Method and Problems Solved by Its Use.

The self-induced deflection or rotation of the indicator (dowsing device) in the hands of certain persons (operators) in the vicinity of an anomalous object is called the biophysical effect (BPE). The sum of methodological measures using the BPE has been called the biophysical method (BPM). The latter is used for locating underground water, mineral deposits, geologic mapping, location of voids etc., together with geophysical geochemical and technical methods. All such work in the USSR has been done outside the state economic plan, that is, at the personal initiative of engineer-geologists, geophysicists, hydro-geologists and geochemists. This group numbers about forty persons.

The data herein presented has been compiled on the basis of official documents forwarded to the central administration of the S. I. Vavilov Scientific-Technical Society of the Instrument-Building Industry for the Interdepartmental Commission on the Biophysical Effect (BPE).

zones and mineralized zones showed up clearly as biophysical anomalies. High effectiveness of aero-biophysical survey from an

## Section I: Effectiveness of the Biophysical Method

### A. Exploration for mineral and non-mineral deposits and geological mapping.

1. **Area:** Yakutiya (Aldan *raion*)
   **Results:** Data collected from 20 trenches, dug to check anomalies found by the biophysical method, clearly established the outlines of structures controlling the ore deposit, of fractured zones which occured after mineralization and also dike contacts.
   **Document or Information Source:** Letter from the Chief of the Navka Expedition, No. 140, 26 January 1973. Operator: Engineer-geologist E. K. Melyshkov.
   **Method Evaluation Based on Documentation:** The biophysical method proved quite effective under conditions encountered in Yakutiya, the Ukraine, and Karelia in mapping of tectonic disturbances during ground and aerial surveys.

2. **Area:** Ukraine (Kirovograd *oblast'*)
   **Results:** The biophysical method (BPM) outlined ore-bearing fault zones under a 50-100 meter mantle of unconsolidated overburden. Out of 10 biophysical anomalies checked by drilling, 8 were associated with mineralized fractured zones.
   **Document:** same as for 1 (above)
   **Method Evaluation:** same as for 1 (above).

3. **Area:** Western Karelia
   **Results:** Faulted zones and mineralized zones showed up clearly as biophysical anomalies. High effectiveness of aero-biophysical survey from an

aircraft has been established when mapping tectonics and ore-bearing zones. This survey, together with airborne geophysical surveys, covered 900 square kilometers. Out of 47 bore holes and trenches made to check biophysical anomalies, 37 showed mineralization and fractured zones, ie. 80% of cases. Out of 55 cases of drilling and trenching in fields where there was no biophysical anomaly, only in 3 cases -- 5% -- were zones of fracturing discovered.

Document: Same as for 1 (above)

Method Evaluation: Same as for 1 (above)

4. Area: Tadzhik SSR (Leninabad oblast', Karemazar)

Results: Along the north-western slope of the Kurusay mineralized area (Lead and Zince), in an anomaly found by biophysical and geochemical methods, four coring bore holes were sunk which hit "blind" ore bodies at depths ranging from 30 to 350 meters.

Documentation: Report by the Chief of the Kurusay party of the geochemical expedition of the Geological Administration of the Tadzhik SSR. Operators: L. Reut and L. Ryabchikov, both students and electro-engineers at the Tula Polytechnical Institute.

Evaluation: The biophysical method is recommended together with lithochemical methods for finding "blind" ore bodies within mineral fields.

5. Area: Uzbek SSR (Tashkent oblast', Chatkal' Ridge)

Results: This area had been earlier explored by various methods and 39 bore holes sunk up to 400 meters in depth over an area of 4 square kilometers. No ore was found. In a structurally favorable point, a biophysical anomaly was detected. The etc. continues for a total of 27 cases + areas

first bore hole struck a blind ore body at 390 meters with a balanced content of ore.

Documentation: Information confirmed by the Section Head of the Machine-Building Ministry on 3 March 1973. Operators: Radio-Electronics students at the Tula Polytechnical Institute.

Evaluation: None given.

6. Area: Russian SFSR (Krasnoyarsk krai, Yenisei Ridge)

Results: a) Drilling operations within the biophysical anomaly found commercial grade gold ore. b) Completely satisfactory biophysical results were obtained with respect to the Udyrey find.

Documentation: Minutes of the 6th Session of the Scientific Council of the Krasnoyarsk Division of SNIITIMS (All-Union Scientific-Research Institute for ), 31 March 1975. Operator: Candidate of Geomagnetic Sciences, Geologist V.G. Prokhorov.

Evaluation: It was noted that planned thematic research was needed to develop theoretical and practical foundations for dealing with methods of biophysical exploration.

7. Area: Tadzhik SSR (Leninabad oblast', Karamazar raion)

Results: All biophysical anomalies established coincided with the location of geochemical aureoles which were associated with outcropping and buried ore bodies of the Kurusay I, Rodnikovo and Turangla fields.

Documentation: Minutes of the 20th Technical Session of the Geochemical Expedition of the Tadzhik SSR Geological Service, 8 November 1971. Operators: Technicians G.B. Vybornov, L Reut, and others.

Evaluation: The BPM should be used for locating bore holes in subsurface exploration within the depression.

(translated from the French by Christopher Bird)

The text below was prepared by the Etablissements Lima, Latem Saint Martin, Belgium and by Andiran (p. Mézin) (Department of Lot and Garonne), France. It was edited by Professors R. Hauspy and F. Lox of the University of Ghent, Belgium based on a presentation by by Hauspy in Cracow, Poland, September 1981.

## BIOLOGICAL TRANSMUTATIONS

(Taken from a presentation on natural transmutations by the Engineer, R. Hauspy, scientific advisor to the Lima Factories, on the occasion of a symposium "Cooperation Areas in Commoditiy Science and Technology to Human Needs," in Cracow, 20 to 23 September 1981. A certain number of the results communicated at that meeting came out of work done in the Lima laboratories)

"Workers in science who are open to new ideas sometimes wonder if the most powerful brake on scientific progress is not that of a failing memory in scientists. They often feel like reminding their colleagues that some of their predecessors were burned because they proposed interpretations which subsequently became established truths. If pioneers in science were still being burned, I wouldn't give much for the skin of C. Louis Kervran."

These were the words of the eminent geologist, Professor Jean Lombard, during a lecture at the Academy of Sciences in Paris in 1966.

But 15 years later, now that academic reactions have changed in style, one can, without running much risk, show interest in the work on transmutations of light elements.

Since 1960, Louis Kervran has done experiment on biological matter. After the first publication of his results, various protests were heard. Others simply smiled, certain that it was a question of analytic error...

Since then, things have developed:

1. The number of analyses on which Kervran builds his hypothesis have now reached several thousand, and performed in an ever growing number of laboratories concentrating on different specialties. Kervran has considerably enlarged the field of observations on which his fundamental hypothesis sheds new light.

2. Kervran's work has been presented throughout the world. In Japan, it is heralded as a scientific event of the first importance. Professor Nagasaki has declared that he came to the same conclusions as Kervran by carrying out research on an electro-magnetic theory of matter.

3. Kervran's principal merit was to have had the intuition that there was something odd in his verifications which required "something new" to explain it; to then have unrelentingly kept after an idea and to have, over many years, patiently accumulated facts, observations, cross-checks, and seemingly unrelated results, to have, at last, known how to make all this come together in a bold, yet solid and gripping hypothesis. Bold, for it seems to be in opposition with the classic conceptions of nuclear physics and biology. Solid, for the facts invoked and observed are numerous and concordant and supported by reasoning without any apparent fault. Gripping, for it opens up new perspectives and horizons in biology, medicine, physics etc.

And, as physicist E. Fischhoff has stated, we are convinced that here we have a series of observations and phenomena of the greatest importance for the progress of our knowledge.

What follows is neither a utilitarian treatise nor a course. We will limit ourselves to offering you some examples of Kervran's research and of our own with the goal of familiarizing you with this new property of matter formulated by Kervran.

Transmutations of elements are in no way something new. They have been studied for centuries. Chemistry cannot explain them for they can be brought about only by a biological intermediary.

It is worth noting that all this research, including those of the past century (Vogel, Van Herzeele, Spindler, Baranger etc.) was done only on plants while, ignorant of this work, Kervran threw light on transmutations in the animal kingdom and attributed them to specific enzymes, with micro-organisms shown to be powerful agents of transmutation.

Calcium (Ca) is one of the most important elements in the earth's crust. It occupies 5th place (3.25%) after oxygen (49.13%), silicon (26.00%), aluminum (17.45%), and iron (4.20%).

If the great limestone formations are from the Secondary epoch, one nevertheless finds earlier ones in the Primary, in the Precambri And in our day calcium is still forming through the intermediary of animals and plants.

According to Kervran, Ca has three origins:

Potassium: $K_{39} + H_{1} : : Ca_{40}$

Magnesium: $Mg_{24} + O_{16} : : Ca_{40}$

Silicon: $Si_{28} + C_{12} : : Ca_{40}$

Kervran explains that these reactions are produced by a transformation of the H, O and C nuclei at the biological level but he does not rule out that they may be provoked by physical energies other than biological ones.

These three origins of Ca are by far the most important, but this does not mean that there are not others.

## Production of Calcium by Plants

Van Herzeele found that in seeds left to germinate without any access to lime, the amount in calcium in the sprouts had increased after 30 days. These experiments were repeated by several scientists (and in our own laboratories) with modern operatory precision and scientific rigor and they produced the same results. Professor P. Baranger, chief of the Laboratory for Organic Chemistry at the Ecole Polytechnique in Paris, had the curiosity to repeat these experiments and thus the scientific proof of them was demonstrated, and in one of the leading institutio in France, that calcium can appear in biological reactions.

But this is not all. It remained be seen whether the Ca could have other origins. On the basis of an hypothesis that the calcium might come from the magnesium in the seed, one should find less magnesium after germination, and this was, in fact, later confirmed.

The study of plants should allow for the determination of the enzyme which is at the origin of the formation of calcium. Calcium loving plants are deprived of it and, unable to make their own calcium, they must get it directly out of the soil. As to the calcifugal plants, which live in siliceous terrain, they own their calcium to the reaction:

$$Si + C :: Ca$$

In any case, it is in these latter plants that one should find the maximal production of the enzyme. This enzyme could also be produced by bacteria (already identified) living in symbiosis with the plants. Various plants, such as maize (corn) and clover, probably possess the faculty of developing their production of the enzyme in cases when their terrain is deficient in Ca.

## Calcium in animals

Aberrant observations are numerous:

An animal exposed to a diet lacking in Ca nevertheless eliminates it in an appreciable manner. Normally, there should be an equality in the amount ingested and eliminated plus fixation or storage. But the quantity of Ca eliminated is greater than the quantity ingested.

A team of workers laboring in the oil fields in the Sahara was observed over 6 months. The averages of analyses made sho ed that they had exreted more calcium and phosphorus than they had absorbed. Concording negative balances were found for Ca and P, as well as a negative balance for Mg. Inversely, when the Mg balance was positive, there was also, for those days, a positive balance for Ca and P. Here, then, is an interesting crosscheck which proves the existence of relations between Mg, P and Ca. It would seem that this formation of Ca and P are controlled by the thyroid and the parathyroid.

During the period of its molting, the crab will secrete, within a few hours, its new shell, but only a little calcium can be found in the animal or even in its mantle. Whence came its calcium? It has been said that it was to be found in the cytoplasm in soluble form and that a rapid chemical reaction would produce it. But no chemical analysis reveals sufficient calcium, even of a soluble nature, nor any so-called organic "pre-calcium."

Let us note also the formation of calcium by the hen or the formation of the chick's skeleton from the egg yolk. When the chick is born, its skeleton contains more calcium that there had been in the entire egg. And, it couldn't have gotten it from outside the egg or from its shell for the latter stays intact.

Below are a few results and protocols from our own experiements:

48 female Swiss mice weighing on the average of 25 grams each were divided into two groups of the same number and weighing about the same. On group served as a control. The other received magnesium through an esophagal probe at a rate of 100 mg. per kg. The food ingested and the excrement were carefully analyzed and the experiment lasted five days. On the 6th day, after 24 hours of fast, the animals were put to death with ether.

After mineralization, the analyses gave the following results:

| | Controls | Experimentals |
|---|---|---|
| Total weight before experiment | 614 g | 604 g |
| " " after " | 628 g | 620 g |
| Total Ca (expressed in Ca) | 1.87 g | 2.48 g |
| Total P (espressed in P) | 1.83 g | 2.40 g |

For the two groups of equal weight, that gives, for the group which received magnesium, a supplementary increase as follows:

2.48 – 1.84 0.64 for the Ca (or 34.78%)

2.40 – 1.80 0.60 for the P (or 33.33%)

With both grups always of the same weight, the animals who received magnesium had a gain of weight 15% greater than the control group (see figure 1 in the annex)

It is thus established, in a distinct, significant and uncontestable manner, by mathmeatical statistics, that it is the Ca and the P which increased overall inconjunction with an overdose of magnesium, and that within a few days only. We may thus affirm that the magnesium is certainly the cause for a rapid increase in Ca and P. This experiment confirms once again other convergent experiments.

We should recall that the animal organism has other mechanisms and that the Ca and the P can have other origins (Si and K for Ca, Si or $N_2$ for P). It was because of the metabolic complexities in animals that complementary experiments were conducted on seeds and on micro-organisms in order to better determine the mechanisms used by nature.

The experiment with the mice established uncontestibly that the ingestion of Mg produced a formation of Ca and P. It apparently follow that the application of this principle would be of great interest not only in animal husbandry but also in the alimentation of adults and children. A systematic study should be undertaken in nurseries, kindergardens and schools etc. It would open new perspectives for problems of alimentation. We insist here on the importance of food products rich in magnesium such as unrefined marine salt and whole grain cereals. While taking care not to overdose (the average daily dose is 1 g/10 kg of body weight in the form of $MgCl_2 . 6 H_2O$ or 1g/25 kg in the form of $MgCO_3$ and the dangerous, or toxic, dose begins at 6 times this daily dose).

In ~~another~~ the first series of experiments, a molting animal was kept for 13 days in a tank containing 75 literes of water and fed nothing. It was then incinerated and analyzed. Here are the resu for the three elements studied (Ca, P and Cu):

| | while molting<br>durant la mue | after<br>après 13 jours | increase<br>augmentation |
|---|---|---|---|
| Ca | 0,390 g | 2,090 g | + 1,70 g |
| P | 0,270 g | 0,300 g | + 0,030 g |
| Cu | 0,0024 g | 0,0030 g | + 0,0006 g |

Thus, in 13 days one could see that the animal multiplied its content in Ca by 5.3 and increase by 11% its content of P and by 25% its content in Cu.

In order to verify these rather surprising results, a second experiment was undertaken with the goal of obtaining a complete account of these elements, thus not only in the animal, but in the total content of the animal and the water. It gave the follow results (see also figure 2 in the annex):

Pour le Ca :

| | while molting<br>durant la mue | after<br>après 17 jours |
|---|---|---|
| IN 75 l. of water<br>dans les 75 l d'eau | 3,75 g | 13,5575 g |
| dans l'animal<br>in the animal | 0,56 g | 1,90 g |
| | 4,31 g | 15,4575 g |

Ca, thus, increase by 3.5 times.

For P:

| | durant la mue | après 17 jours |
|---|---|---|
| dans les 75 l d'eau | 0,1575 mg | 0,1425 mg |
| dans l'animal | 380,0 mg | 430,0 mg |
| | 380, 1575 mg | 430,1425 mg |

P thus increased 13% in the animal in 17 days

It is striking that the total quantity of P in the water is very low and insignificant compared to what has been created by the animal who which could not get 50 mg of P out of the water since the water contained only 0.15 mg.

For Cu:

| | durant la mue | après 17 jours |
|---|---|---|
| dans les 75 l d'eau | 1,95 mg | 4,95 mg |
| dans l'animal | 3,40 mg | 5,51 mg |
| | 5,35 mg | 10,46 mg |

The copper doubled in quantity in the water-animal ensemble and increased by 61% in the animal alone. The animal ejected copper into the water which contains 2.5 times as much. The absolute increase in the animal is 2.11 mg. It is thus larger than what was contained in the original water, or 0.026 mg per liter or 1.95 mg per 75 liters, while at the end of the experiment one find 0.066 mg. per liter.

## Conclusions:

Experiments made on animals confirm observations made on man. They show that there are grounds, in biology, to take account of positive balance-sheets which are not due to experiment error.

Seeds and Plants (K, Ca, Mg)

a) Oat seeds Oat seeds of an average weight of 27.5 mg per seed were germinated over 4 weeks in tanks containing doubly distilled water. There was no way any Ca could get to them, either through the air, or through the water, or through the material in contact with the seeds.

The sprouts were harvested, dried, incinerated and dissolved in hydrochloric acid. Aliquot parts as well as control sprouts were analyzed in several different ways before the results were compared.

__Results__ ( in mg):

| | per seed<br>par graine | per plant<br>par plante | Δ |
|---|---|---|---|
| K | 0,113 | 0,080 | - 0,033 |
| Ca | 0,027 | 0,059 | + 0,032 |
| Mg | 0,031 | 0,024 | - 0,007 |

(see also figure 3 in the annex).

Other results obtained in our laboratory:

| | mg $Ca^{++}$/100 g M.S. | $Mg^{++}$ | $K^{+}$ |
|---|---|---|---|
| avant germination | 68,5 | 146,48 | 359,50 |
| après 1 semaine | 70,10 | 136,67 | 356,17 |
| 2 semaines | 113,99 | 151,26 | 309,49 |
| 4 semaines | 144,22 | 159,17 | 281,14 |

(see also figure 4 in the annex)

2. A series of 100 seeds (reults in % per 100 g of dry matter):

| | Ca | K | Mg |
|---|---|---|---|
| Before<br>Avant germination | 100 % | 100 % | 100 % |
| After<br>Après germination : | | | |
| 1 semaine | + 2,30 % | - 2,82 % | + 0,031 % |
| 2 semaines | + 66,40 % | - 67,25 % | + 0,053 % |
| 3 semaines | + 89,75 % | - 90,82 % | + 0,061 % |
| 4 semaines | + 110,50 % | -112,60 % | + 0,059 % |

(see also fig. 5 in anne

1) The variation of Mg in absolute value is minimal. It is practically nil, and has been confirmed by other experiments.

2) There is, thus, a very good convergence between the values for Ca and K, which allows one to conclude that the increase in Ca comes probably from the parallel decrease of K in the acid mileu, when the reaction, according to Kervran:

$$^{39}_{19}K + ^{1}_{1}H \quad : \quad : \quad ^{40}_{20}Ca$$

which emphasixes the decrease of K compared to Ca.

b) The same experiments were made with wheat seeds of different varieties in different milieus.

| Milieux | g $Ca^{++}$/100 g de cendres | | g $Mg^{++}$/100 g de cendres | | g $K^{+}$/100 g de cendres | |
|---|---|---|---|---|---|---|
| | Avant germination : | | | | | |
| - | 3,168 | 100 % | 6,354 | 100 % | 2,182 | 100 % |
| | Après germination de 4 semaines en milieux différents : | | | | | |
| Sand<br>Sable | 5,688 | 179,54 % | 4,728 | 74,40 % | 1,175 | 53,80 % |
| washed Sand<br>Sable lavé | 5,187 | 163,73 % | 4,554 | 71,67 % | 1,164 | 53,35 % |
| Inoxyd.<br>Récipient inox. | 4,932 | 155,68 % | 4,632 | 73,04 % | 1,349 | 61,82 % |
| Récipient plastique<br>plastic | 5,083 | 160,45 % | 4,702 | 74,00 % | 1,319 | 60,45 % |

The results show the complexity of biological processes. Actually, in the same conditions as for the germination of oat sees, the quantity of Ca in wheat always increases, while at the same time there is not only a decrease in K but also in Mg, which is not the case for oats.

We may conclude that Kervran has had the merit and the courage to propose a general hypothesis supported by numerous examples taken from various disciplines, many of which seemed extremely convincing to us.

Kervran's hypothesis, while corroborated by applications, can be explained in a satisfying manner. It will have difficultie to overcome within a framwork of fundamental theory. But there is nothing abnormal about such a thing itself and similar circumstances have often come to light in the history of science.

Professor Ir. Hauspy R.
Professor Dr. Lox F.

Note: (by Kervran: Note that R. Hauspy, when he did the experiments the results of which he presents above, was a chemical engineer who was in charge of the analytic laboratory for natural food products prepared by the LIMA factory in Latem Saint Martin near Ghent. This technical consultant gave course in Ghent University where he became a full-time tenured professor at the Faculty of Sciences. It would seem from the concluding remarks that the authors are not yet acquainted with the works of Kervran showing that the theoretical explanation of the physica phenomenon caused by living material is within the framework of "weak energy interactions" (and thus have nothing to do with chemistry which is an application of electromagnetic energy, nor with "strong interactions" which are the most "spectacular," the most "explosive" of the atomic energies.) The theory of "weak energy interactions" was only accepted internationally at the end of 1979, its authors having received the Nobel Prize in Physics. see Kervran, *Transmutations a Faible Energie et Physique Moderne* , Maloine, Paris, 1982.

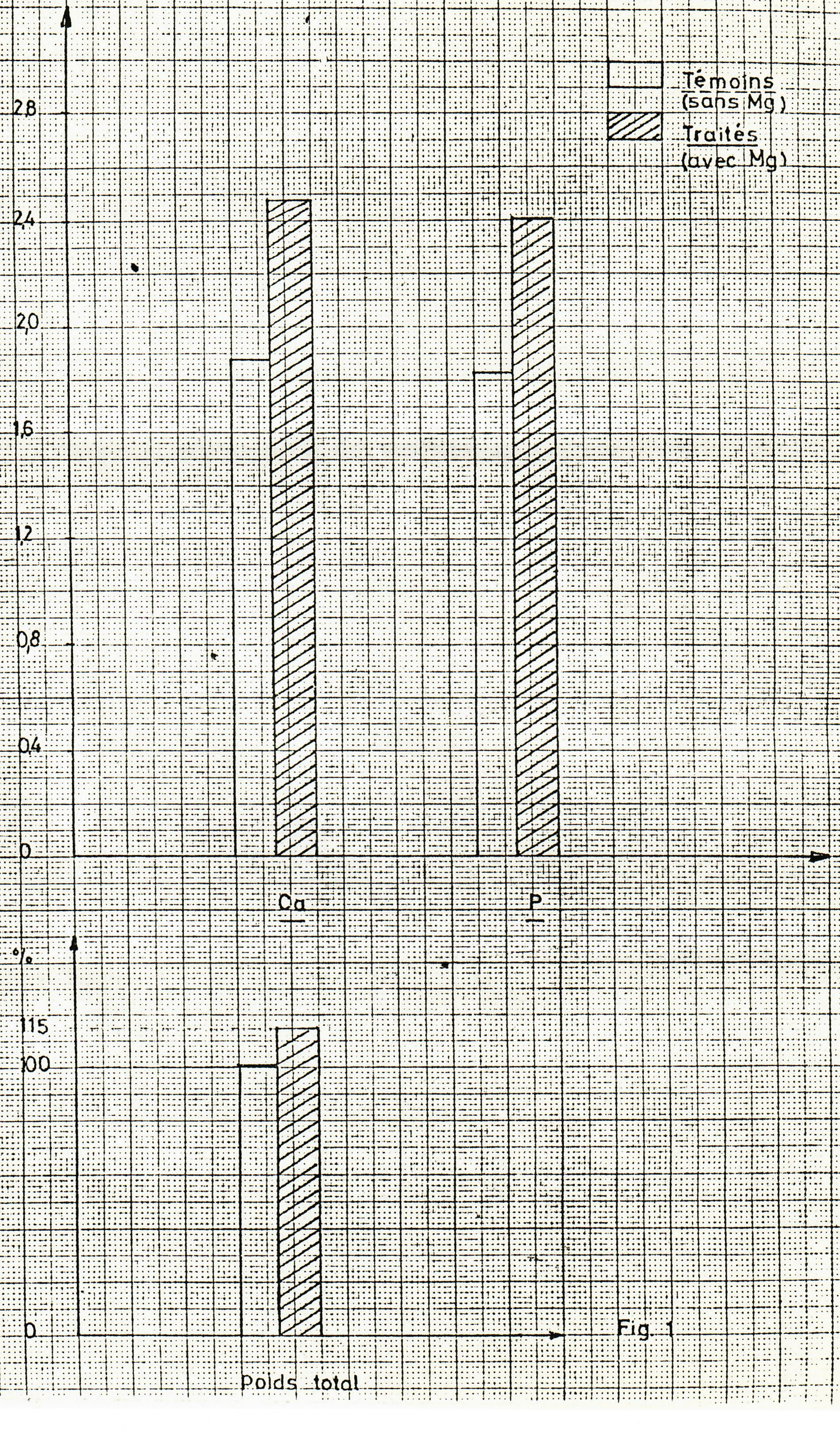
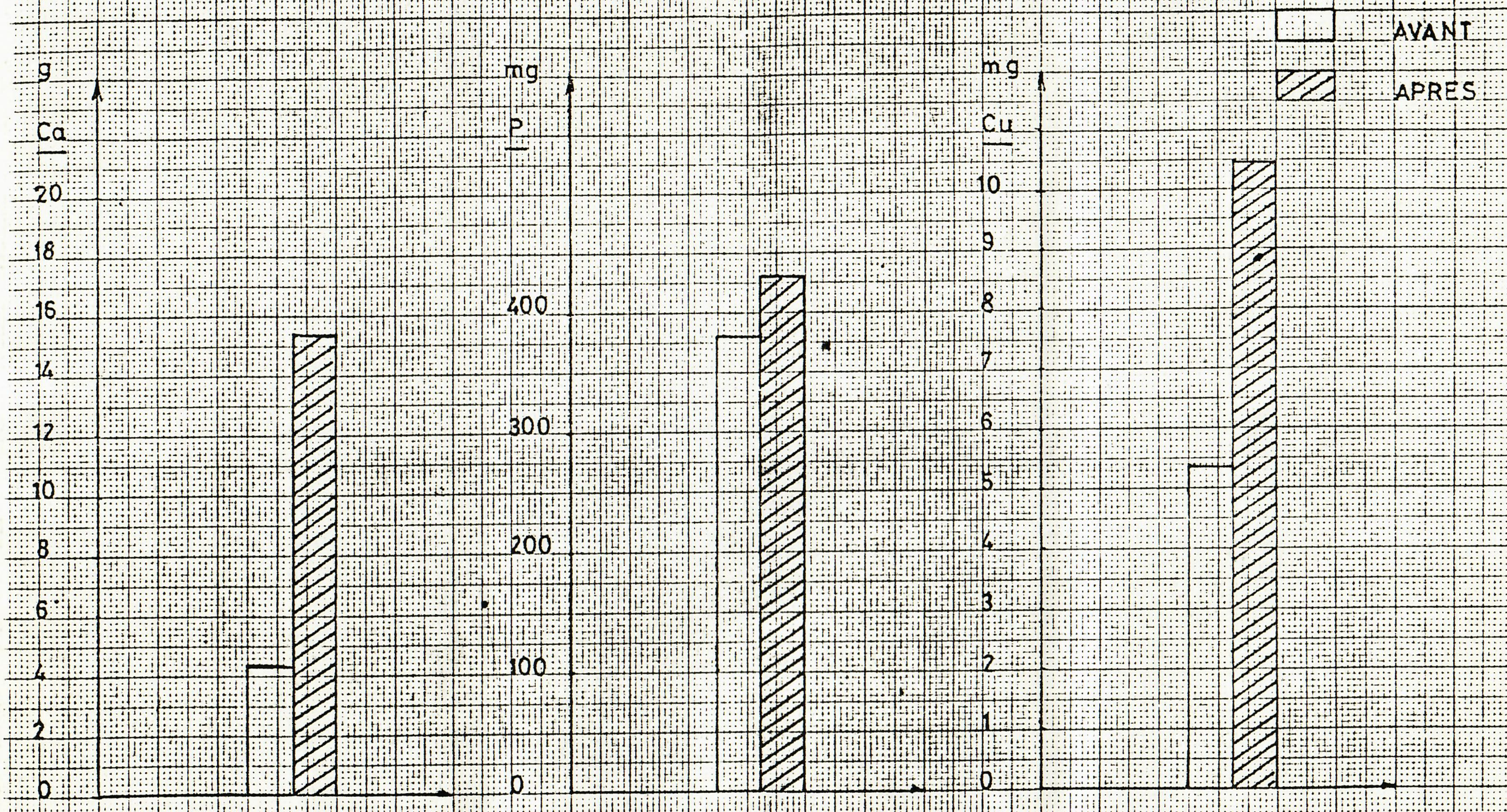

Témoins (sans Mg)
Traités (avec Mg)
2,8
2,4
2,0
1,6
1,2
0,8
0,4
0
Ca
P
%
115
100
0
Poids total

Fig. 1



TOTAL (EAU + HOMARD) DE Ca, P et Cu.

Fig. 2

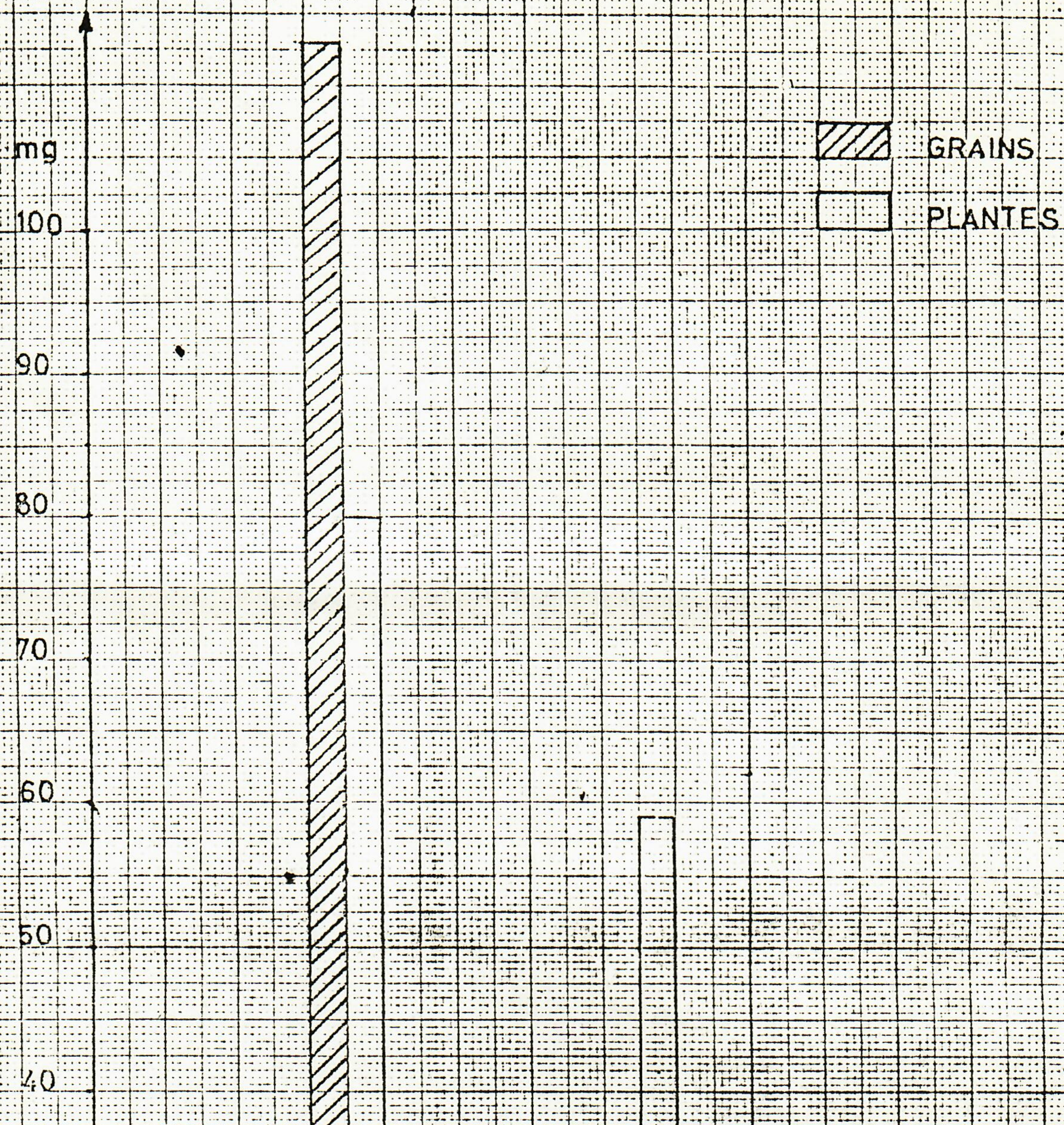


Fig 3

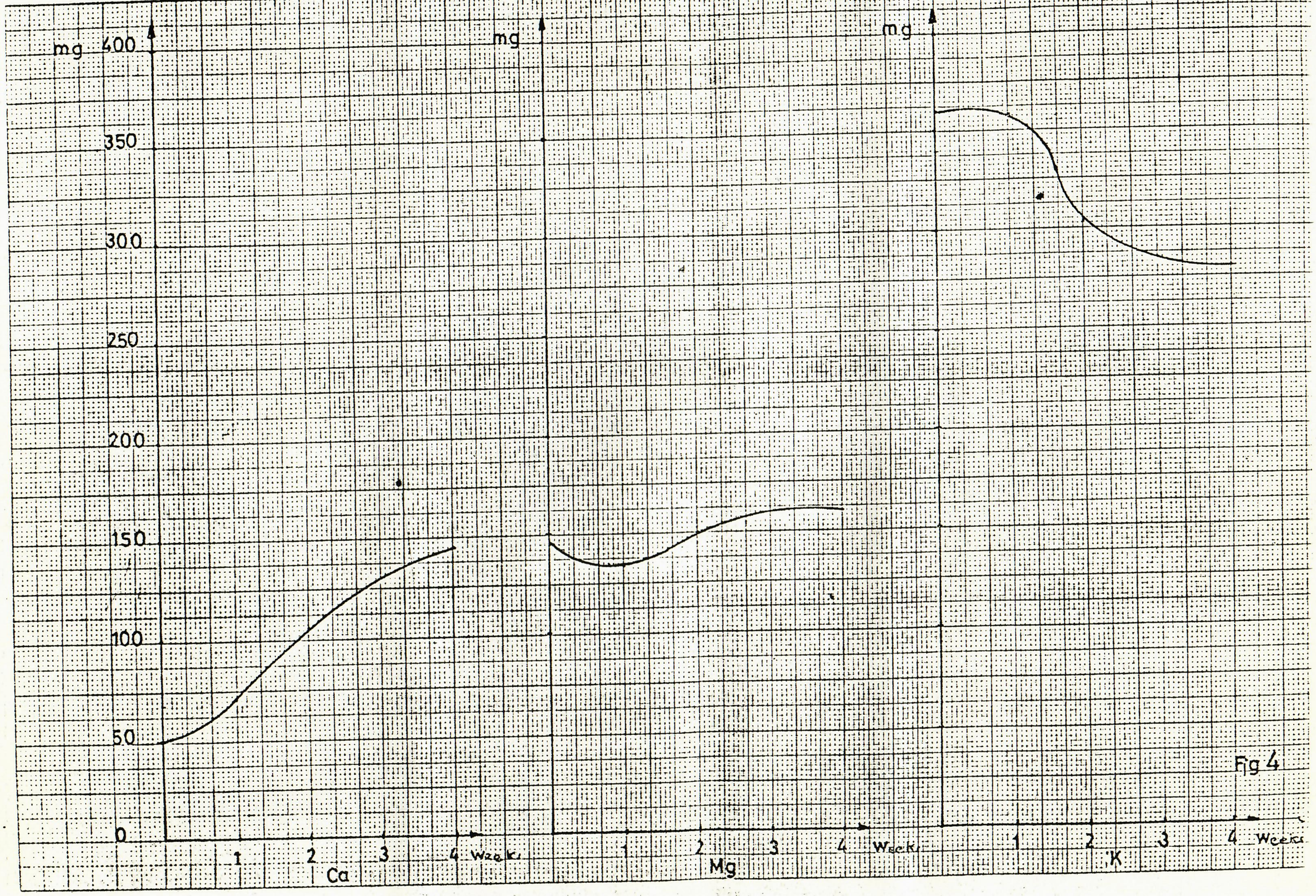
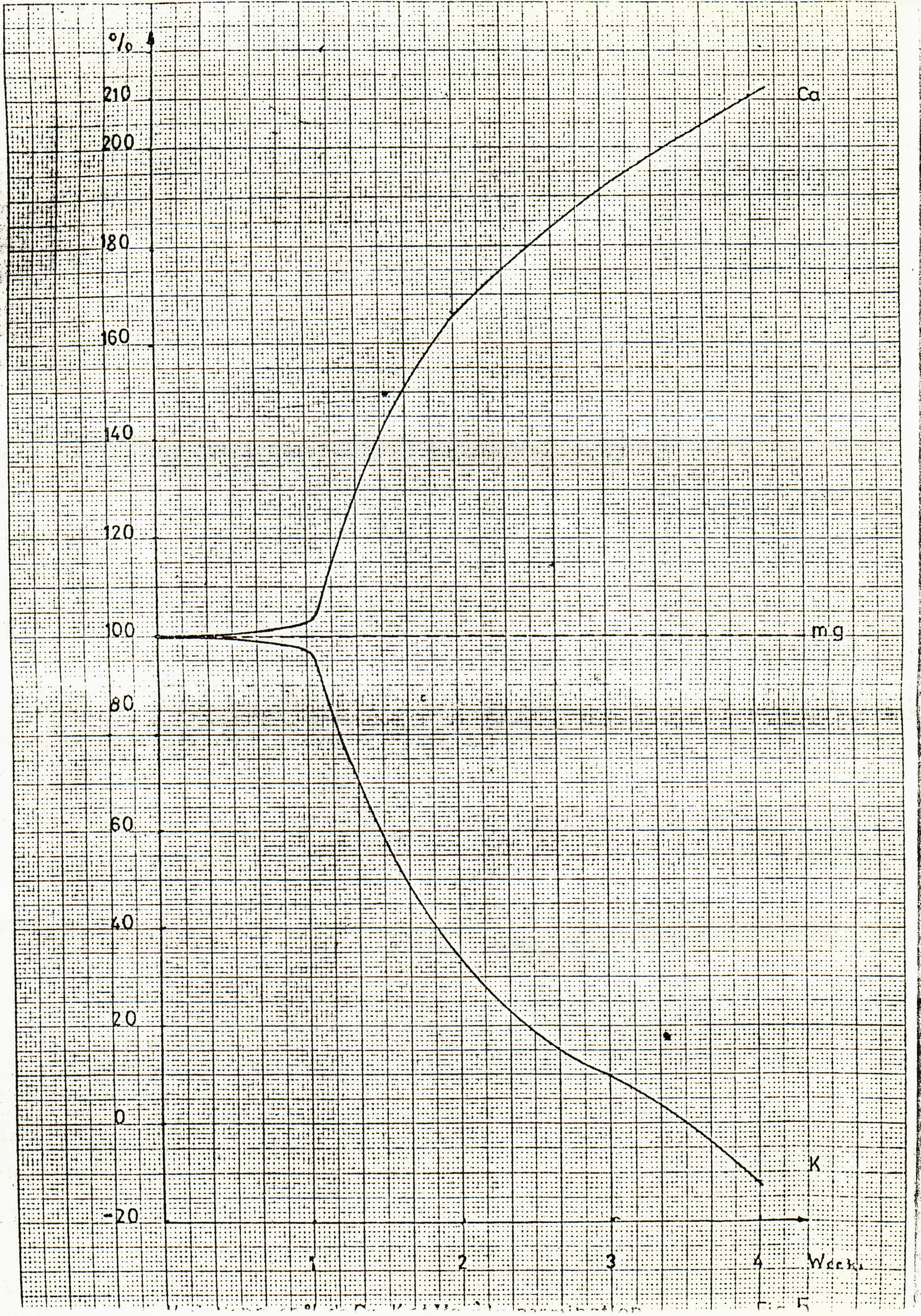

mg
400
350
300
250
200
150
100
50
0
1
2
3
4
Week
Ca
mg
1
2
3
4
Week
Mg
mg
1
2
3
4
Week
K

Fig 4


%
210
200
180
160
140
120
100
80
60
40
20
0
-20
Ca
mg
K
1
2
3
4
Weeks

*Physiol. Chem. & Physics* 10 (1978)

# ANATOMICAL LOCALIZATION OF HUMAN DETECTION OF WEAK ELECTROMAGNETIC RADIATION: EXPERIMENTS WITH DOWSERS*

ZÁBOJ V. HARVALIK**
5901 River Drive, Lorton, Virginia 22079

• *Positive responses (dowsing signals) were evoked from 14 male "dowsers" by exposure to artificial electromagnetic (ac) fields. When the kidney area was shielded, such responses failed to occur. This suggests that magnetic sensors exist in man, probably located in the renal vicinity. Extinction of response was also observed when the head was shielded. This suggests the existence of additional magnetic sensory apparatus in the brain. Discrimination among magnetic patterns (signatures) is hypothesized to account for the apparent ability of dowsers to find specific underground substances, notably water. Such discrimination would require functional association of the sensory apparatus with a signature processor. Data are presented suggesting that this sensor-processor complex does indeed exist and may be located in the vicinity of the pineal gland.*

## INTRODUCTION

A paper presented at the 48th annual meeting of the Virginia Academy of Science reported that certain overt physical responses known as "dowsing signals" were obtained from human subjects by exposing them to an artificial magnetic (dc) field.[1]

As background it should be mentioned that in numbers of areas throughout the world, individuals called "dowsers" are relied upon to find water. Formerly the dowser would traverse a given sector while carrying a pendulum or gripping a forked limb or staff; today the dowser customarily holds an L-shaped rod in each hand. The expectation of dowser and client is that when and if underground water is approached, the L-rods will move in a characteristic way (see EXPERIMENTAL, below). This response, said to signal where a successful well can be sunk, is what dowsers term the "dowsing signal."

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* Presented in part at the 54th Annual Meeting of the Virginia Academy of Science, Medical Sciences Section, George Mason University, Fairfax, Virginia, May 14, 1976.

** *Biographical Note:* Dr. Harvalik was born in Yugoslavia and educated in Czechoslovakia. He received a Ph.D. in physical chemistry from Prague University. Formerly Associate Professor of Physics at the University of Missouri and Professor of Physics at the University of Arkansas, he has been director of the basic research group of the U.S. Army Engineering Laboratories, Fort Belvoir, Va. Since his retirement in 1973, he has continued to pursue his lifelong hobby: the study of the physics of dowsing; i.e., the mechanism by which so-called dowsers reputedly find underground water and other substances.

Zetetic scholar

An Independent Scientific Review of Claims of Anomalies and the Paranormal

Marcello Truzzi, *Editor*

July 14, 1982

Dear Mr. Bird:

My records are unclear as to whether or not I answered your letter to me of a couple of years ago,(I think I did but see that I have no copy in my files. If I failed to do so, please accept my apology.)

I write you now because I understand that you are associated with Mankind Research Unlimited. I am most intersted in knowing more about that organization and its current status. Since I am seeking to establish an international network of expertise on anamalies research (I enclose some flyers and an application form should you wish to be a resource consultant), the MRU sounds quite relevant. Also, I am told that they are concerned with Soviet efforts, and I have been compiling an extensive bibliography on U.S. and Soviet government work on paranormal matters (I am already in touch with Stan Krippner, Larissa Vilenskaya and some others in this regard). I also have done some work on Chinese parapsychology and wonder if the MRU is monitoring that as well.

In any case, I do want to re-establish contact with you over what I think are our mutual interests.

Sincerely,

Marcello Truzzi

Department of Sociology
Eastern Michigan University
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(313) 487-0184

**CSAR Center for Scientific Anomalies Research**

P.O. Box 1052 • Ann Arbor, Michigan 48106 • U.S.A.

**Director**
Marcello Truzzi, Ph.D.

**Associate Director**
Ron Westrum, Ph.D.

January 22, 1985

Mr. Christopher Bird
3414 N Street, N.W.
Washington, DC 20004

Dear Mr. Bird,

My current work on the connections between psi research and quantum physics plus the likelihood that I will be doing an article on the current state of dowsing prompts this letter to you. Both these areas have made me more aware of the psychotronics writings, where you figure prominently, and I thought it might be good a idea to write you and re-establish contact.

As you are probably aware, there is a healthy and welcome emergence of new anomalistics organizations (Sturrock's SSE, my CSAR, and Scott Jones' Center for Applied Anomalous Phenomena), and cooperation has been excellent between them. Though I tried to write Carl Streicher recently about Mankind Research Unlimited, my letter was returned unforwarded. Do you happen to have an address for him now?

My piece for OMNI on the paraphysicists may get me to the D.C. area, mainly to see E.H. Walker. If this works out, I hope it might be possible for us to meet. I think we'd have a good bit to talk about.

Do you happen to know if Benson Herbert is still publishing the INTERNATIONAL JOURNAL OF PARAPHYSICS? (Funny that there is also a Herbert Benson who is also lately interested in psi -- mainly the Chinese work on qigong.)

When I checked my file, I found that there seems to be no indication that I ever responded to your sending in you CSAR application form -- which I normally do with a form letter-- so I enclose what may be a redundant second copy with this letter; and, of course, my apology if I failed to send it earlier as I meant to do.

Cordially,

Marcello

Marcello Truzzi

**Publications:**
CSAR Bulletin
Zetetic Scholar

7 Feb 1985

**CHRISTOPHER BIRD**
**3414 N Street, N.W.**
**Washington, D.C. 20007**
**U.S.A.**

Kaunakakai
(Molokai)
HAWAII

Dear Marcello Truzzi!

Thanks for your letter of 22 January. I see that you will be doing an article on the *current state of dowsing*. In this connection, have you been keeping up with the issues of *The American Dowser* over, say, the past 3 years? You may find some very interesting information there. The track record of dowsers' predicting "Big Oil's" lamentable attempts to drill for oil in such places as the Baltimore Canyon, St. George's Bank, Gulf of Alaska come to mind. Also, past ASD (American Society of Dowsers) president T. E. Ross has contributed some $10,000 to the ASD in fees received by the Ecuadorian subsidiary of a NYSE-listed company for having successfully dowsed water wells for Ecuador's largest brewers + other companies, a good article on dowsing in (church) archaeology summarized from a leading British archaeological magazine, ETC., etc. Maybe we should have a talk about this... It is good to see you getting on track after the lamentable review of my book, The Divining Hand you wrote a number of years ago.

also remarkable data on Paul Margraff (Belgium) in Feb 1985 issue of The American Dowser (10 pp.!!)

I haven't seen much in print from Sturrock's organization and nothing, as yet, from Jones's.

When will you be coming to DC to interview E. Harris Walker?

I believe Benson Herbert is still at it. Who + where is Herbert Benson?

all best

PS. In my opinion, in DOWSING, Theory is minimally meaningful, RESULTS maximally meaningful!! !!

## Obituary: Christopher Bird (1928-1996)

Christopher Bird, 68, best-selling author, naturalist, humanitarian, and researcher of anomalous phenomena and science, died of a strike suffered at his home in Blairsville, Georgia, Thursday, May 2nd, 1996.

Mr. Bird's best-known book, *The Secret Life of Plants*, which he co-authored with Peter Tompkins, became a long-running best-seller, and added a new dimension to the environmental movement, begun by Rachel Carson's *Silent Spring*. Its premise, that plants had some measure of consciousness and an awareness of the world around them, caused intense controversy in science and a popular revolution in the way in which people regarded plants. The idea of talking to one's plants became a staple of conversation, as well as a source of humor and levity. Still in print, *The Secret Life of Plants*, was translated into 15 languages and was followed in 1979, by *The Divining Hand*, recognized as the definitive book on the ancient practice and history of dowsing, and in 1991 by *Secrets of the Soil*, also co-authored with Peter Tompkins, and is considered by many to be one of the most important books ever written on organic farming, gardening and soil management. Many of the once controversial implications of *The Secret Life of Plants*, and *Secrets of the Soil* are now accepted foundations of the organic farming and gardening movement. His experience of being attacked, often in highly personal tones, by mainstream science, led Mr. Bird to spend the later years of this life exploring the question of how science deals with the apparently anomalous. In 1993, he wrote *The Trial and Persecution of Gaston Naessens*, concerning the trial and acquittal of Canadian biologist Gaston Naessens over his unorthodox cancer research. At the time of his death, Mr. Bird was completing a book on water.

Mr. Bird, scion of one of Massachusetts' oldest families, came by his interest in nature through his forefathers — the Birds donated their extensive holdings on Chappaquidick Island to the Commonwealth of Massachusetts to create a wildlife sanctuary, and their estate in East Walpole was recognized for its variety of trees and flora. He was also a gifted linguist, and these two interests were reflected from the earliest days of his education. He attended Milton Academy and Harvard College, where he took a degree in Botany with a minor in Chinese. On his own he taught himself Russian by living with a Russian emigre family. In pursuit of research for his many books and articles, he traveled the world over, and was also fluent in French, Spanish, Chinese, Japanese, and Serbo-Croatian. After leaving Harvard, he was awarded a Masters Degree in Eastern European Studies from American University in Washington, DC.

In 1952, Bird was recruited by the Central Intelligence Agency and sent to Japan. After leaving the CIA, he volunteered for the Army, where in 1955, he was one of the first 50

American soldiers sent to Vietnam, as part of an elite Special Forces unit. After leaving the service, Mr. Bird undertook further graduate studies in Anthropology at the University of Hawaii, while also working as a reporter for the *Honolulu Advertiser*. Returning to Washington, D.C., in 1957, he translated Russian novelist Nikolai Narokov's *Imaginary Quantities* into English; it was published in the U.S. in 1958 as *The Chains of Fear*. Mr. Bird then went to work for the Rand Corporation in Santa Monica, California as the Special Assistant to James Rand, and later headed the Washington, DC office of the Rand Corporation. In 1966, he became foreign correspondent for *Time Magazine* in Yugoslavia. Upon returning from Yugoslavia in 1968, he met Mr. Tompkins, who played a prominent role in the OSS during World War II, and who was also a linguist and writer. Common backgrounds and shared interests led first to friendship and, then, their decades long collaboration which included extensive research on the life and work of Wilhem Reich.

Mr. Bird's involvement in many civic and professional organizations included, with his long-time friend the late Arthur Young, the Institute for the Study of Consciousness, and the American Society of Dowsers of Danville, Vermont, which he served as Trustee and the international editor of *The American Dowser*. At the time of his death Mr. Bird was Vice-Chairman of the Riess Institute of Washington, DC, which he co-founded in 1983.

Christopher Bird is survived by his wife Shabari, and four daughters, Kristina, Lehua, Doina, and Zvia, from his first marriage; a step-son Tim Bunge from his second marriage; as well as two brothers, an identical twin, Mr. David Bird, of Cambridge, Massachusetts, and Mr. Charles Sumner Bird, III, of Aiken, South Carolina. A delayed memorial service is being planned for late August to allow family members and friends to attend.

Application to Become a Consultant to the Center for Scientific Anomalies Research
(Please print or type responses.)

Name of applicant: Christopher Bird     Date of application 28 July 1982

Degrees and/or relevant training BA (Harvard - Biology) MA (American Univ Soviet and E. European Studies)

Professional affiliation or position Writer

Publications relevant to scientific anomalies research: *The Secret Life of Plants* (with Peter Tompkins -- Harper and Row 1973) *The Divining Hand The 500 Year Old Mystery of Dowsing* (Dutton 1979)

Membership(s) in other organizations relevant to anomalies research: Contributing Editor: *New Age* (Boston) *New Realities* (San Francisco) *Journal of Paraphysics* (England)

Your special area(s) of anomaly concern (e.g., parapsychology, UFOs, etc.):

Character of your anomaly work (e.g., experimental, academic, etc.):
To document and write up data for public consumption in a responsible way

What do you hope to gain from being a consultant to CSAR?
Maybe nothing...maybe enlightenment...maybe alot of other things

Name and address as you wish them listed in the CSAR CONSULTANTS DIRECTORY:
Christopher Bird 3414 N Street N.W. Washington D.C. 20007

Telephone(s): (202) 338-3839 home; ( ) office same

This application is to become a [ Research Consultant ____ Resource Consultant ____ (please check one)

We would like to know as much about your expertise as possible. Please attach any vitae or bibliography on your work available. Off-prints of your work for the CSAR files would be most welcome. Please use the back of this form to add any information you wish to convey to us.

Please give us two references for persons familiar with your work re anomalies and who are likely known to us: Dr. Zl V. Harvalik 5901 River Dr. Lorton Virginia

Dr. E. Stanton Maxey 891 East Ocean Blvd. Stuart Florida

Dr. William A. Tiller Materials Science, Stanford University

Prof. O. Costa de Beauregard, Institut Henri Poincare, Paris.

Return this to: CSAR; Box 1052; Ann Arbor, MI 48103

THANKS